AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): Voice connection system between humans and animals~~, in particular domestic animals~~, comprising:

- sensor means designed to be positioned on an animal~~, in particular on its head and/or neck,~~ for converting pulses detected on the animal's body into electric signals indicating a status of said animal,

- processing means operatively associated ~~to~~ with the sensor means, comprising memory means into which human voice messages corresponding to different statuses of the animal are recorded,

- loudspeaker means operatively connected to the processing means, the ~~latter~~ processing means ~~being designed to receive~~receiving the electric signals coming from said sensor means and ~~for~~ activating said loudspeaker means in order to issue a voice message selected in said memory means, in function of the aforesaid electric signals received,

- voice recognition means ~~operative~~ for sending to the processing means signals representing the content of voice messages uttered by a human user, and

- pulse-generating means, which receive from said processing means said signals representing the content of the voice messages uttered by the human user, and which send to the animal's brain corresponding pulses,

wherein

- said processing means includes a neural network control system ~~is implemented into said processing means~~,

- said sensor means comprises first and second electroencephalographic ~~type~~ sensors~~, i.e. operating for detecting electric activity in the animal's brain,~~ and an electromyographic sensor ~~type sensors, i.e. operating for detecting electric activity in the animal's muscles and/or nerves~~,

- at least the first and second encephalographic ~~type sensor means~~sensors are placed close to ~~a~~ respective ~~ear~~ ears of the animal, or ~~anyhow~~ close to its occipital-temporal region, and the electromyographic ~~type sensors means are~~sensor is placed on the animal's neck, and

- said pulse-generating means ~~are operative for sending~~send radioelectric waves directly to the animal's brain.

Claim 2 (currently amended): System according to claim 1, wherein said recognition means converts~~are operative for converting~~ the animal's vocalizations into radioelectric waves, through said pulse-generating means.

Claim 3 (original): System according to claim 1, wherein said neural network control system is programmed for enabling a human/animal interactive self-learning procedure, where in particular

- the human user can correct or acknowledge with his/her voice messages the correctness of the voice messages issued by said loudspeaker means, and/or

- the animal can hear the human voice and the corresponding radioelectric waves simultaneously, thus associating the two stimuli.

Claim 4 (original): System according to claim 1, wherein said sensor means, said processing means, said loudspeaker means, said voice recognition means and said pulse-generating means are integrated into a collar.

Claim 5 (original): System according to claim 1, wherein said voice recognition means are used as means integrated and/or complementary to said sensor means, in order to improve the interpretation of the animal's status as detected through said sensor means.

Claim 6 (currently amended): System according to claim 1, wherein said system develops~~it is operative for developing~~ in ~~the~~ time, through an evolutional process, a language which is the animal's own language, because~~thanks to the fact that~~ the animal perceives - both

with its own ears and through the stimuli produced by said pulse-generating means – its own vocalization and the voice output of said loudspeaker means.

Claim 7 (currently amended): System according to claim 1, wherein said electric signals indicating a status of the animal are the result of stimuli, feelings, events, actions, and/or behaviors, including those shown by the motion of the animal's muscles.

Claim 8 (new): Method for allowing vocal connection between a human and an animal, comprising the following steps:

i) detecting on the body of the animal electric pulses in the animal's brain, muscles and/or nerves, which are indicative of a status of an animal in terms of stimuli, feelings, events, actions, behavours, including those shown by the motion of the animal's muscles;

ii) converting the detected pulses into first electric signals which are sent to processing means;

iii) selecting by the processing means a stored human-type vocal message corresponding to received first electric signals and activate as a consequence a loudspeaker for emitting a selected human-type vocal message, thus simulating the possibility of speaking for the animal;

iv) receiving human-type vocal messages in a speech recognition means and sending respective second electric signals to the processing means; and

v) generating, by the processing means, stimuli for inducing the animal to take determined actions or perceive determined feelings as a function of the type of the received electric signals,

wherein, for the purpose of performing step v), the received second electric signals are converted into radioelectric waves having different frequencies and amplitudes, which can directly reach the animal's brain.

9. (new): the method according to claim 8, wherein the animal is brought to develop its own language in time with an evolutive process, through an interactive loop comprising steps i) to v), including the hearing by the animal of the vocalizations it generates, as per steps i) to iii), in association with its reactions to the environment